

# Toward Increased Continuity of HIV Care: Predictors of Eligibility Interruption after First Enrollment Among California AIDS Drug Assistance Program (ADAP) Clients

Dayakaran Aulakh MPH, MBA¹, Ann Nakamura, MPH¹, Kelly Wu, MS¹ • ¹Office of AIDS, California Department of Public Health, Sacramento, CA

#### **BACKGROUND**

- Publicly funded AIDS Drug
  Assistance Programs (ADAPs)
  provide access to life saving
  medications for uninsured and
  underinsured people living with HIV.
- Funding for ADAP care and treatment is provided by the Ryan White HIV/AIDS Program, which acts as a "payer of last resort."
- ADAP's goal is for people to remain continuously enrolled while eligible, but federal statute mandates that people renew their eligibility every 6 months.
- The complexities of ADAP recertification have been identified as a potential obstacle in medications being filled on time.<sup>1</sup>
- To retain services, clients must substantiate eligibility by providing supporting documentation of identity, residency, income and abide by Federal eligibility renewal and recertification requirements.<sup>3</sup>
- California employs administrative and technical approaches to meet federal requirements and minimize clients' eligibility determination burden. These include:
  - Temporary Access Periods (TAPs)
  - Automated eligibility reminders
  - Development of a client portal
- Preventing ADAP eligibility disruptions is critical to continuity of care, particularly for newly diagnosed clients.
- Adherence to antiretroviral medications, financially covered by ADAP, is crucial for viral suppression and the reduction of transmission.<sup>2</sup>
- Little is known about which clients are most vulnerable to ADAP eligibility interruption. This analysis will evaluate interruptions in ADAP eligibility.

## **METHODS**

- Using a retrospective design we examined length of uninterrupted eligibility after initial enrollment and the percent of eligible days using the California ADAP Enrollment System (AES) for adults newly enrolled between March 4, 2017 and September 4, 2019 (n = 12,867).
- Kaplan-Meier analyses and parametric regression log-survival time models were used to test for differences and identify significant predictors of uninterrupted eligibility duration.
- Model predictors included: Insurance Status, Race/Ethnicity, Gender, and Age.
- Clients without an interruption in eligibility as of December 4, 2019 were censored.

## DATA SOURCES

- The AES is a custom-designed ADAP enrollment management system implemented in March 2017. Through continuous development since its launch, the system provides the following functionality:
  - AES manages client eligibility information, verifies submission of supporting documents, automatically calculates eligibility dates based on eligibility inputs, and sends automatic notifications to alert enrollment workers and clients of upcoming eligibility deadlines.
  - AES has an optional client portal that can be used to confirm eligibility dates, obtain enrollment contact information, and perform limited self-service eligibility renewal functions.

## TABLES AND FIGURES

**Table 1:** Descriptive Statistics of Duration of ADAP Eligibility Prior to an Interruption (Months)

Variable	# Clients	Mean	Std. Dev.	Median
Insurance Status				
Insured	4,785	9.47	7.17	8.00
Uninsured	8,082	6.82	6.24	6.00
Race				
African-American	2,497	6.47	5.97	6.00
Non-African-American	10,370	8.13	6.86	7.00
Gender				
Cisgender Male	11,350	7.83	6.75	7.00
Cisgender Female	1,298	7.85	6.68	7.00
Transgender	219	6.30	5.55	6.00
Age				
18 - 26	1,435	5.49	5.19	4.00
27 - 64	10,543	7.84	6.70	7.00
65+	889	11.12	7.75	10.00

those of the author(s) and do not necessarily represent the official views of, nor an endorsement by, HRSA, HHS, or the U.S. Government.

**Figure 1:** Median Duration by Age (10 Year Increments) and Insurance Status

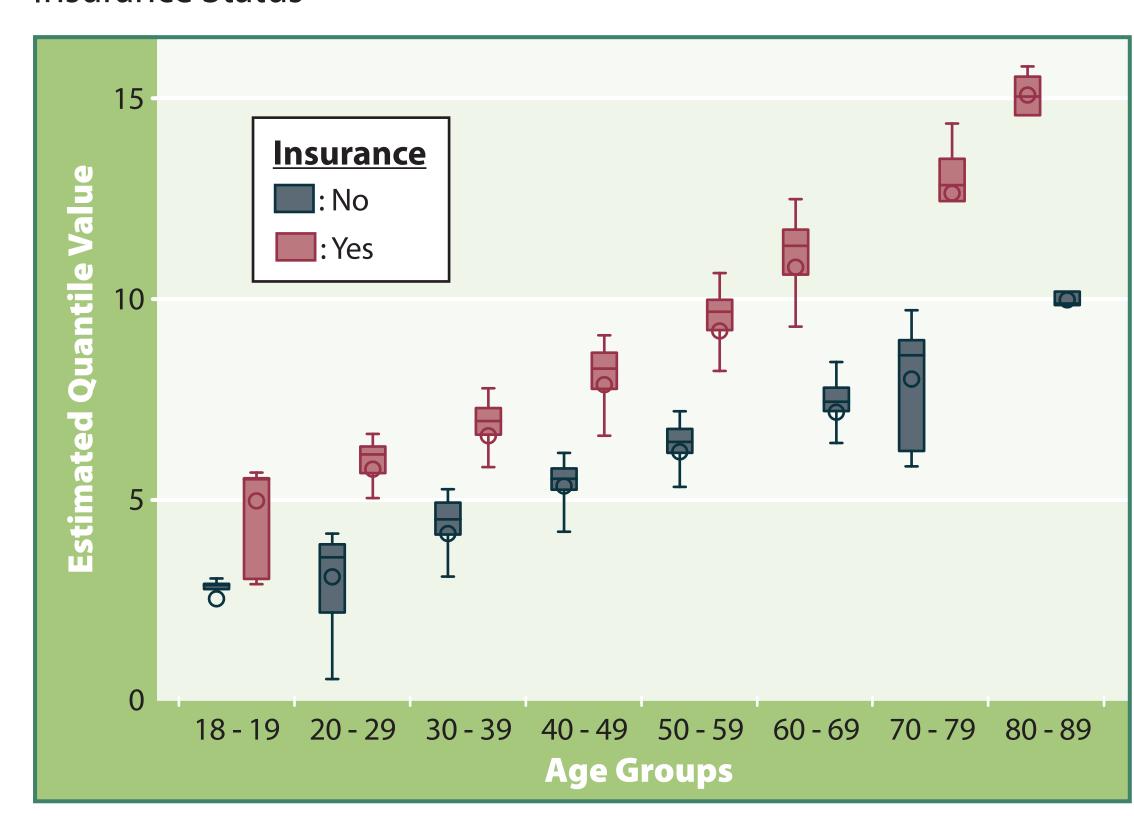
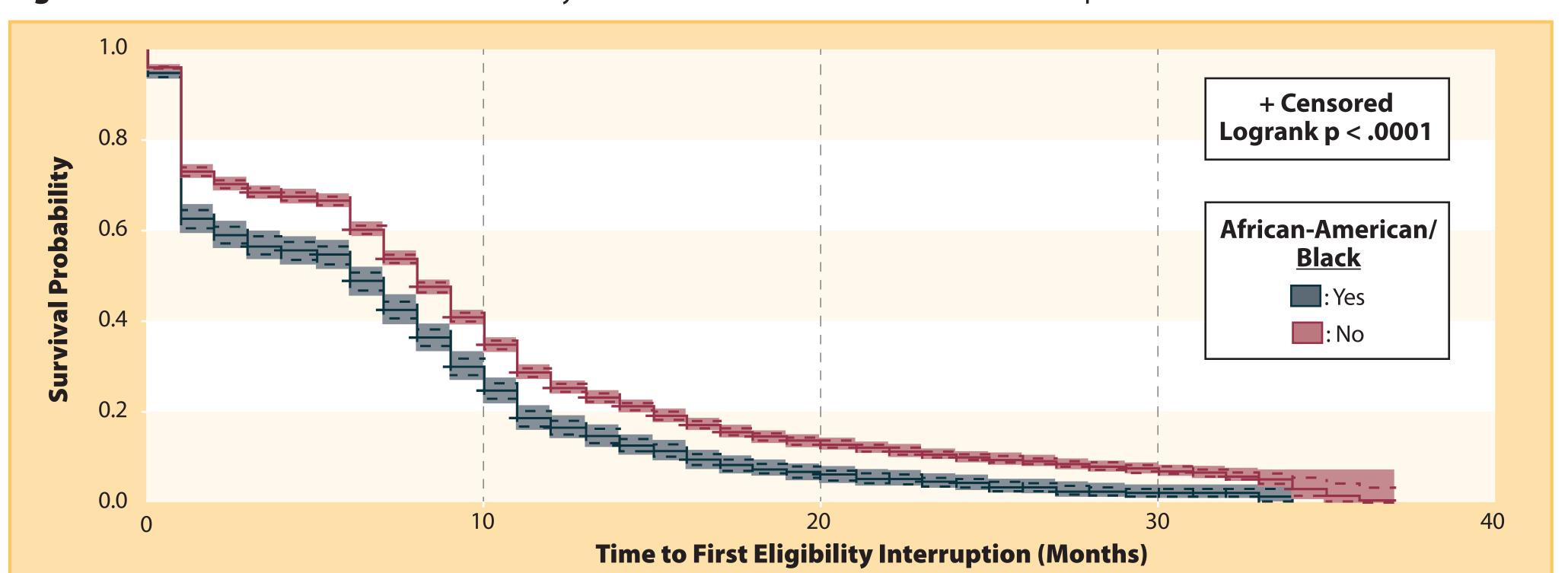


Figure 2: Product-Limit Survival Estimates by Race With 95% Confidence Limits and Equal Precision Bands



### RESULTS

- 12,867 clients were enrolled between March 4, 2017 and September 4, 2019.
- The overall Percent of Days of ADAP Eligibility (number of maintained days of eligibility) ÷ (number of potential days eligible) was high (median 100%, IQR 72-100%).
- The median length of interruption, for those with a lapse, was 28 days.
- Over one third (37%) of clients experienced at least one day of interrupted eligibility after initial enrollment.
- The risk of an eligibility interruption coincided with clients' first eligibility deadlines at 1, 6, and 12 months.
- Age (p<.0001), insurance status (p<.0001), race (p<.0001), and gender (p<.055) were associated with initial eligibility duration.
- Black/African American clients experienced 2.2 fewer months of ADAP coverage due to eligibility interruptions than non-black/African American clients (p<.0001).
- Uninsured clients experienced 1.3 fewer months of uninterrupted eligibility than insured clients (p<.0001).
- Each year of increase in age was associated with a two day increase in uninterrupted ADAP eligibility (p<.001).
- Median duration of uninterrupted eligibility times increase faster with age for insured compared to uninsured (p<.0001).
- Average uninterrupted eligibility duration for cisgender men, cisgender women, and transgender people, at age 18, was 6.0, 6.1, and 5.1 months, respectively.

## DISCUSSION

- Shorter periods of uninterrupted eligibility after initial enrollment suggest young, transgender, and black/African American people living with HIV face barriers to providing supporting eligibility documentation at initial ADAP enrollment and are at increased risk of care disruption.
- Changes in institutional practices and policies that reduce enrollment disruptions for new ADAP clients, particularly for vulnerable populations, could improve client health and lower administrative program costs. Examples include:
  - Increasing Enrollment Worker outreach to clients.
  - Continued development of client portal functionality.

# CONCLUSIONS

- The frequency at which clients experience interruptions underscores the importance of state and federal policies that provide flexibility and reduce client administrative burden.
- The tendency for clients to have an interruption in eligibility at their first enrollment deadline, combined with a high rate of eligibility retention overall, suggests that initial enrollment is a particularly vulnerable time for clients and that clients' eligibility retention improves with time.
- California's institutional practice of 30-day Temporary Access Periods may play a critical role in the early entry into HIV care for younger HIV-positive individuals.